

March 10, 1964

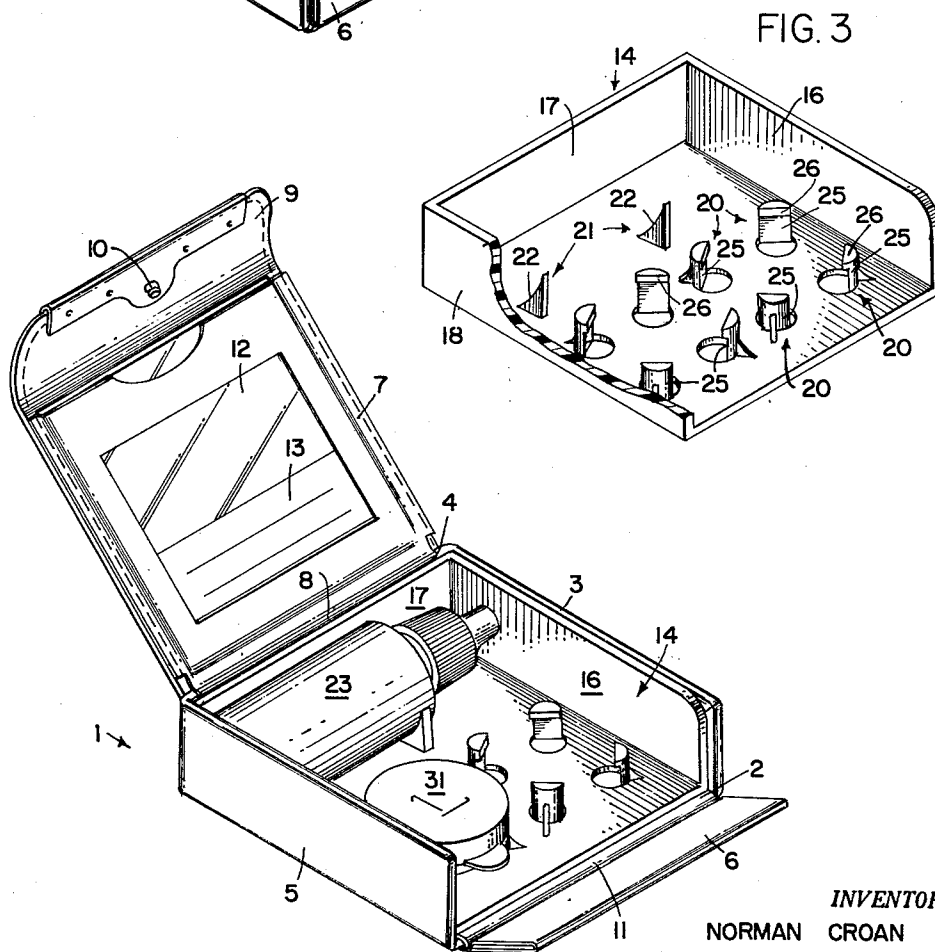
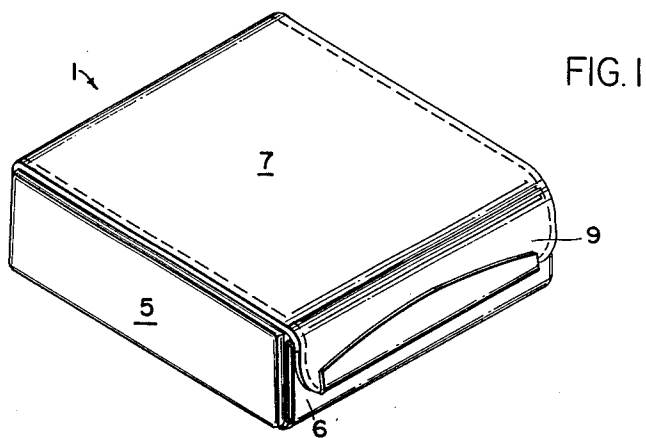
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3,124,240

CONTACT LENS CASE

Filed Nov. 25, 1960

2 Sheets-Sheet 1



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FIG. 4

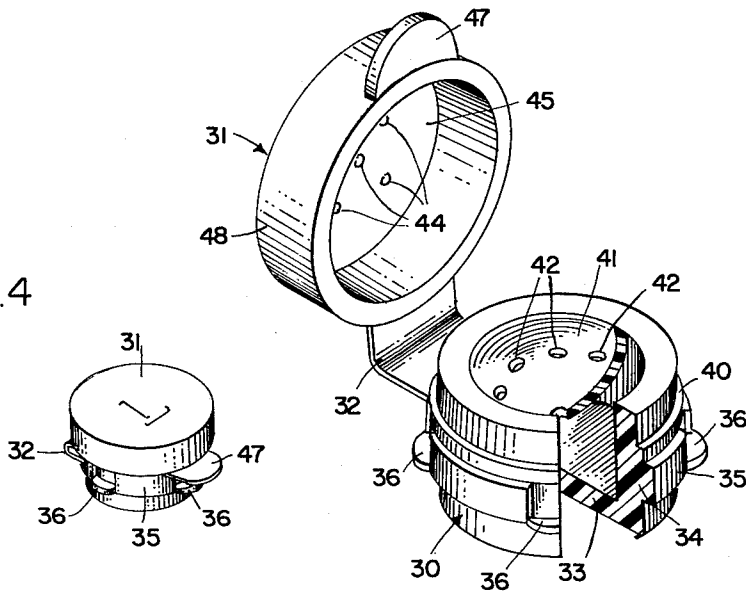


FIG. 5

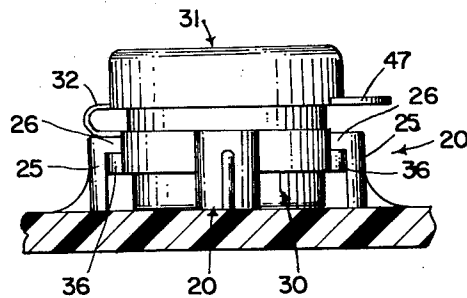


FIG. 6

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CONTACT LENS CASE

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2 Claims. (Cl. 206—5)

The present invention relates to a contact lens case. It is an object of the present invention to provide a compact, attractive, easily cleaned contact lens case. A further object of the present invention is to provide a contact lens receptacle particularly adapted and suited for mounting in the case. The receptacle is also designed to contain a contact lens so as to permit its easy removal from the receptacle when desired without likelihood of the lens sticking to the walls of the receptacle. A still further object of the present invention is to provide a contact lens receptacle having a unique shelf arrangement adapted to support a contact lens above a fluid medium with which the lens is wet while in the receptacle.

In the present invention there is provided a case having a tray with clamping means. The clamping means removably secure a pair of contact lens receptacles to the bottom of the tray. Each receptacle is formed with a base for containing a contact lens and liquid medium, and a cap for the base which is integrally connected to the base by a hinge-like connecting web. The base is formed with a recess covered by a concave shelf having holes formed therein. The shelf surface conforms with the outer surface contour of the contact lens and is adapted to support the lens in spaced relation to the bottom of the base within which a fluid medium is contained.

These and other objects and advantages of the present invention will be more clearly understood when considered in conjunction with the accompanying drawings in which:

FIG. 1 is a perspective view of the assembled case in closed position,

FIG. 2 is a perspective view of the assembled case with one receptacle removed in open position,

FIG. 3 is a perspective view of the tray,

FIG. 4 is a perspective view of the receptacle with the cap closed,

FIG. 5 is a perspective cut-away view of the receptacle with the cap open, and

FIG. 6 is a fragmentary cross sectional elevation of the tray with the receptacle secured thereto.

A case 1 having a bottom 2, side walls 3, 4, 5 and 6 is formed integrally with a cover 7. The cover 7 may be hinged at 8 to the side wall 4 with a flap 9 at its opposite edge. This flap 9 may be formed with a male fastener 10 adapted to engage a corresponding female fastener on the outer surface of side wall 6. The side-wall 6 may be hinged to the bottom 2 to permit easier access to the interior of the case. If desired, a mirror 12 and identification means 13 may be secured inside the cover 7. The case 1 may be formed of any suitable material such as leather or plastic materials.

Positioned within the side walls 3, 4, 5 and 6 is a tray 14. This tray is formed of suitable plastic material such as polyethylene and has a bottom 15 and three side walls 16, 17 and 18. Integral with the bottom 15 are a plurality of clamping elements 20 and braces 21. These clamping elements 20 and braces 21 may be integrally molded with the tray. The braces 21 are positioned parallel with one another and each comprises a flange extending upwardly from the bottom 15 with parallel arcuate surfaces 22. These arcuate surfaces 22 are adapted to engage a polyethylene bottle 23 and secure it within the tray between the braces 21 and the wall 17.

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This polyethylene bottle is adapted to contain a supply of cleaning fluid normally used in connection with contact lenses.

The clamping elements are each formed with a leg 25 extending normally from the bottom of the tray and integral with it. Legs 25 terminate at their upper ends in lips 26. These clamping elements are preferably arranged in two groups of four with each group arranged radially about a central axis. The lips 26 are preferably coplanar and extend inwardly towards the center axis. These lips engage the contact lens receptacle in a manner as hereafter described.

The contact lens receptacle comprises a base 30, a cap 31 for the base and a flexible web 32 integral with the cap and base and forming a hinge therebetween. The base 30 is formed with a bottom 33 and a cylindrical side wall 34 continuously with the bottom 33 and adapted to contain a fluid medium. The outer surface of the side wall 34 is formed with an annular ridge 35 preferably substantially equally distant from the upper and lower edges of the side wall. Four outwardly extending flanges 36 are radially formed along this ridge 35. The flanges 36 are preferably coplanar with one another and are formed with their upper surfaces spaced from the bottom of the base a distance such that when the base is positioned on the tray 14, the upper surfaces of the flanges 36 may frictionally engage the lower surfaces of the lips 26. The base may be inserted between the clamping elements of either group by pushing the receptacle toward the bottom of the tray between the clamping elements with the flanges 36 intermediate the lips 26. When the bottom of the base is in facing relation to the upper surface of the tray, the receptacle is turned until the flanges 36 engage the lips 26.

Preferably four clamping elements 20 and four flanges 36 each radially arranged at 90° apart are used.

The upper edge of the side wall 34 is formed with a shoulder 40 so as to provide an improved frictional engagement with the cap 31. Within the side wall 34 is positioned a shelf 41 having the surface remote from the bottom 33 concave as illustrated in FIG. 5. This shelf is force fit into the opening formed by the side walls 34 and covers this opening. A plurality of holes 42 in the shelf 41 provide passages to the interior of the receptacle so that fluid may flow through to either side of the shelf.

The cap 31 is formed with a plurality of bosses 44 on the inside of its top 45. These bosses 44 keep a contact lens from adhering to the inner surface of the top 45. This could otherwise occasionally happen if the contact lens positioned within the receptacle inadvertently turned over, so that the convex surface of the lens was adjacent to the inner surface of the top 45. A tab 47 is integral with the side wall 43 of the cap 31. This tab is used for readily opening and closing the cap.

What is claimed is:

1. A contact lens receptacle comprising a cylindrical base having a bottom and continuous side walls integral with said bottom and adapted to contain a fluid medium, a rigid shelf secured within said side walls at the edge remote from said bottom thereby forming a space between said shelf and bottom, said shelf having a plurality of holes formed therethrough through which a fluid medium may drain and having a concave surface on the side of said shelf remote from said bottom, said surface adapted to support a contact lens in facing relation, a cap for said base having a continuous side wall adapted to engage said side wall of said base and a top having means projecting from the inner surface thereof to maintain a contact lens located in said base in spaced relation from

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said top when said cap is closed, and a web integral with said cap and base forming a hinging means.

2. In a contact lens case assembly a tray having a bottom and side walls, a plurality of clamp elements integral with said bottom and each comprising a leg normal to and integral at one end with said bottom and a lip integral with the other end of said leg, said lips projecting toward an axis central with respect to said legs, a closed, contact lens enclosing, receptacle positioned between said clamp elements and having continuous receptacle side walls and a bottom integral with said receptacle side walls, said bottom resting on said tray, means forming a plurality of outwardly flared flanges integral with said receptacle side walls and parallel to and displaced from said bottom, said flanges each in friction engaging relation with one of said lips whereby said receptacle is secured to said tray and means forming an enclosing case within which said tray and receptacle are positioned.

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